

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/003173

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01L1/12 G01L9/00 G01K13/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 GOIL GOIK

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and where practical search terms used)

EPO-Internal , INSPEC , PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document with indication where appropriate, of the relevant passages	Relevant to claim No
X	US 6 507 187 B1 (OLIVAS JOHN D ET AL) 14 January 2003 (2003-01-14) column 2, line 49 - line 65	1, 10, 24, 26
Y	claims 1,3,9; figures 1,2 column 6, line 53 - line 58 column 5, line 57 - column 6, line 14 column 7, line 20 - line 35	2-4, 9, 14, 15, 21, 25
A	----- -/-	12, 13

☒ Further documents are listed in the continuation of box C

☒ Patent family members are listed in annex

### \* Special categories of cited documents

- <sup>1</sup>A\* document defining the general state of the art which is not considered to be of particular relevance
- <sup>1</sup>E\* earlier document but published on or after the international filing date
- <sup>1</sup>L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- <sup>1</sup>O\* document referring to an oral disclosure, use, exhibition or other means
- <sup>1</sup>P\* document published prior to the international filing date but later than the priority date claimed

- <sup>1</sup>T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- <sup>1</sup>X\* document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- <sup>1</sup>Y\* document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents such combination being obvious to a person skilled in the art
- <sup>1</sup>Z\* document member of the same patent family

Date of the actual completion of the International search

18 July 2005

Date of mailing of the international search report

23.08.09

Name and mailing address of the ISA

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rCr/IB2004/003173

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	EP 0 650 139 A (ENIX CORPORATION) 26 April 1995 (1995-04-26)	2-4, 9, 25
A	column 4, line 20 - line 35; figures 1, 5, 10 column 5, line 1 - line 5 column 8, line 31 - line 33 column 8, line 53 - column 9, line 10; figures 9, 10 -----	6-8
Y	OLSON E.R. ET AL: "Integrating giant magnetoresistive current and thermal sensors in power electronic modules" APEC 2003. 18TH. ANNUAL IEEE APPLIED POWER ELECTRONICS CONFERENCE AND EXPOSITION. MIAMI BEACH, FL, FEB. 9 - 13, 2003, ANNUAL APPLIED POWER ELECTRONICS CONFERENCE, NEW YORK, NY : IEEE, US, vol. 1, 9 February 2003 (2003-02-09), pages 773-777, XP002334290 NEW YORK page 774, paragraph B -----	14, 15, 21
A	US 6 476 113 B1 (HILES MAURICE) 5 November 2002 (2002-11-05) column 6, line 35 - line 53 column 7, line 10 - line 18 -----	5, 9, 12
A	PATENT ABSTRACTS OF JAPAN vol. 013, no. 057 (P-825), 9 February 1989 (1989-02-09) 6 JP 63 247631 A (NIPPON SIGNAL CO LTD:THE), 14 October 1988 (1988-10-14) abstract -----	14-23, 27, 28

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons

- 1 ☐ Claims Nos  
because they relate to subject matter not required to be searched by this Authority, namely
- 2 ☐ Claims Nos  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such  
an extent that no meaningful International Search can be carried out, specifically
- 3 ☐ Claims Nos  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a)

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows

see additional sheet

- 1 ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all  
searchable claims
- 2 ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment  
of any additional fee
- 3 ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report  
covers only those claims for which fees were paid, specifically claims Nos  
1-9, 12-28
- 4 ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is  
restricted to the invention first mentioned in the claims, it is covered by claims Nos.

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest
- ☒ No protest accompanied the payment of additional search fees

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10,12,13,24-26

a pressure sensor with a plurality of layers , at least one magnetic layer and a compressible layer. A process for manufacturing the same and a method to detect pressure.

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2. claim: 11

a magnetic sensor associated to a pressure monitoring system of a tyre

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3. claims: 14-23,27,28

a temperature sensing device with a plurality of layers, at least one magnetic layer a process of manufacturing the same and method to detect temperature.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/003173

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6507187	B1	14-01-2003	NONE
EP 0650139	A	26-04-1995	JP 2520848 B2 31-07-1996
			JP 7174649 A 14-07-1995
			DE 69422582 D1 17-02-2000
			DE 69422582 T2 25-05-2000
			EP 0650139 A1 26-04-1995
			US 5526701 A 18-06-1996
US 6476113	B1	05-11-2002	AU 6120000 A 28-12-2000
			CA 2366105 A1 14-12-2000
JP 63247631	A	14-10-1988	NONE